

SDG&E, June 14, 2019
 Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing, Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.
 In Response to Data Request, R15-01-008 2019 June Report
 Appendix 8; Rev. 03/29/19

Summary Tables:

System Categories	Emission Source Categories	Fugitive or Vented	For Reference Only: 2015 Baseline Emissions (Mscf)	2018 Total Annual Volume of Leaks & Emissions (Mscf)	2018 Total Annual Count of Leak & Emission Items	2019 Total Annual Volume of Leaks & Emissions (Mscf)	2019 Total Annual Count of Leak & Emission Items	Emission Change for Year Over Year Comparison from 2018 to 2019 (Mscf)	Percentage Emission Change for Year Over Year Comparison from 2018 to 2019	Count Change for Year Over Year Comparison from 2018 to 2019	Percentage Count Change for Year Over Year Comparison from 2018 to 2019	Emission Change for Year Over Year Comparison from 2015 to 2019 (Mscf)	Percentage Change for Year Over Year Comparison from 2015 to 2019	Explanation for Significant Percentage Change for Year Over Year Comparison from 2018 to 2019
Transmission Pipelines	Pipeline Leaks	Fugitive	87	87	Leak count: 0 Total System Mileage: 232	83	Leak count: 0 Total System Mileage: 221	(4)	(4.7%)	(11)	(4.7%)	-4	(4.6%)	
	All Damages	Fugitive	0	0	Number of emission items: 0	0	Number of emission items: 0	-	-	-	-			
	Blowdowns	Vented	3,426	58.9	Number of blowdown events: 86	201	Number of blowdown events: 141	142	241.3%	55	64.0%	-3,225	(94.1%)	Blowdowns emissions are a function of activity level. Blowdown volume varies by activity, depending on the type of work performed. The increase is due to pipeline integrity projects in 2019
	Component Emissions	Vented	1	0	Number of devices: 0	0	Number of devices: 0	-	0.0%	-	0.0%	-1	(100.0%)	
	Component Leaks	Fugitive	N/A	0	Number of leaks: 0	0	Number of leaks: 1	-	-	1		0	0.0%	No Pipeline Component Leaks Reported for 2019
	Odorizers	Vented	2	143	Number of units: 24	155	Number of units: 25							2018 values have been corrected. The values previously submitted had calculation errors An additional tab was added to Appendix 1 titled "2019 Corrected Odorizers" to show updated 2018 emissions from odorizers
Transmission M&R Stations	Station Leaks & Emissions	Fugitive	22,216	25,121	Number of facilities: 36	25,121	Number of facilities: 36	12	0.0%	1	4.2%	153	7,650.0%	
	Blowdowns	Vented	31	22	Number of blowdown events: 109	2	Number of blowdown events: 92	(20)	(90.9%)	(17)	(15.6%)	-29	(93.5%)	The higher emissions in 2018 were due to one maintenance blowdown event
Transmission Compressor Stations	Compressor Emissions	Vented	1,262	1,305	Number of compressors: 10	1,038	Number of compressors: 10	(267)	(20.5%)	-	0.0%	-224	(17.7%)	The decrease in emissions is due to fewer operating hours
	Compressor Leaks	Fugitive	NA	N/A	N/A	N/A	N/A							This worksheet was combined with Component Leaks worksheet
	Blowdowns	Vented	3,956	1562	Number of blowdown events: 184	2,521	Number of blowdown events: 264	959	61.4%	80	43.5%	-1,435	(36.3%)	The higher emissions in 2019 are due to two blowdown events
	Component Emissions	Vented	NA	887	Number of devices: 43	862	Number of devices: 41	(25)	(2.4%)	(2)	(4.7%)	0	0.0%	
	Component Leaks	Fugitive	1,085	2,919	Number of leaks: 90	384	Number of leaks: 29	(2,535)	(66.8%)	(61)	(67.8%)	-703	(64.6%)	Leak survey and repair was accelerated due to the CARB Oil & Gas Regulations
	Storage Tank Leaks & Emissions	Vented	3	13	Number of emission items: 110	18	Number of emission items: 238	5	38.5%	128	116.4%	15	500.0%	The increase in emissions is due required venting to reduce vessel pressure due to temperature fluctuation
Distribution Main & Service Pipelines				3,999	Number of known leaks: 545 Estimated number of unknown leaks: 81 Total number of leaks: 626	6,031	Number of known leaks: 678 Estimated number of unknown leaks: 149 Total number of leaks: 827	2,032	50.8%	201	32.1%	-27,699	(82.1%)	
	Pipeline Leaks	Fugitive	33,730											
	All Damages	Fugitive	8,894	9,410	Number of damages: 398	8,791	Number of damages: 398	(619)	(6.6%)	-	0.0%	-103	(1.2%)	Damages have decreased due to expanded Public Awareness Program regarding Dig-Alert
	Blowdowns	Vented	45	455	Number of blowdown events: 252	1,369	Number of blowdown events: 248	914	200.9%	(4)	(1.6%)	1,324	2,942.2%	The increase in emission is due to Pipeline Safety Enhancement Plan projects in 2019. Blowdowns emissions are a function of activity level. Blowdown volume varies by activity, depending on the type of work performed.
	Component Emissions	Vented	0	0	0	0	0	-	-	-	0.0%	0	0.0%	
	Component Leaks	Fugitive	0	0	0	0	0	-	-	-	0.0%	0	0.0%	
Distribution M&R Stations	Station Leaks & Emissions	Fugitive	80,978	75,883	Number of stations: 475	75,675	Number of stations: 475	(208)	(0.3%)	-	0.0%	-5,303	(6.5%)	
	All Damages	Fugitive	NA	0.2	2	0	0	(0.2)	-	2		0	0.0%	
	Blowdowns	Vented	16	21	Number of blowdowns: 2,901	16	Number of blowdowns: 2,630	(5)	(23.8%)	(271)	(9.3%)	0	0.0%	Blowdowns emissions are a function of activity level. Blowdown volume varies by activity, depending on the type of work performed
Customer Meters	Meter Leaks	Fugitive	126,261	128,476	Number of meters: 886,334	129,326	Number of meters: 894,767	850	0.7%	5,493	0.6%	3,065	2.4%	
	All Damages	Fugitive	NA	3,003	Number of damages: 244	1,438	Number of damages: 227	(1,565)	(52.1%)	(17)	(7.0%)	0	0.0%	The reduction in meter damages is attributed to the Gas Infrastructure Protection Program
	Vented Emissions	Vented	54	171	Number of blowdown events: 54,007	53	Number of blowdown events: 53,515	(118)	(69.0%)	(492)	(0.9%)	-1	(1.9%)	Blowdowns emissions are a function of activity level. Blowdown volume varies by activity, depending on the type of work performed.
Underground Storage	Storage Leaks & Emissions	Fugitive	0					-	0.0%	-	0.0%	0	0.0%	
	Compressor Emissions	Vented	0					-	0.0%	-	0.0%	0	0.0%	
	Compressor Leaks	Fugitive	0					-	0.0%	-	0.0%	0	0.0%	
	Blowdowns	Vented	0					-	0.0%	-	0.0%	0	0.0%	
	Component Emissions	Vented	0					-	0.0%	-	0.0%	0	0.0%	
	Component Leaks	Fugitive	0					-	0.0%	-	0.0%	0	0.0%	
	Dehydrator Vent Emissions	Fugitive	0					-	0.0%	-	0.0%	0	0.0%	
Unusual Large Leaks	(Description)			0								0	0.0%	
Total			282,047	253,536		253,084		(452)	0%			-28,963	(10.3%)	

Legend

Corrected Values

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System Wide Leak Rate Data

1/1/2018 - 12/31/2018

The highlighted cells show the volumes that are summed together as the throughput for calculating the system wide leak rate.

Gas Storage Facilities:

Average Close of the Month Cushion Gas Storage Inventory (Mscf)	Average Close of the Month Working Gas Storage Inventory (Mscf)	Total Annual Volume of Injections into Storage (Mscf)	Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Withdrawals from Storage (Mscf)	Explanatory Notes / Comments
N/A	N/A	N/A	N/A	N/A	

Transmission System:

Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Gas Transported to or for Customers* in State (Mscf)	Total Annual Volume of Gas Transported to or for Customers* out of State (Mscf)	Total Annual Volume of Gas Transported to utility-owned or third-party storage fields for injection into storage (Mscf)	Explanatory Notes / Comments
199,113	85,646,940	0		

Distribution System:

Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Gas Transported to or for Customers* in State (Mscf)	Total Annual Volume of Gas Transported to or for Customers* out of State (Mscf)	Explanatory Notes / Comments
68,125	82,538,356		

*The term customers includes anyone that the utility is transporting gas for, including customers who purchase gas from the utility.

Customers can be anyone including residential, businesses, other utilities, gas transportation companies, etc.

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Natural Gas Properties	Average Mole Percent	Explanatory Notes / Comments
Methane	94.10%	Rainbow
Carbon Dioxide	0.67%	Rainbow
Ethane	3.81%	Rainbow
C3+	0.36%	Rainbow
C6+	0.01%	Rainbow
Oxygen	0.20%	Estimated up to limit, Not Tested
Hydrogen		Not Tested
Sulfur	0.00%	Rainbow
Water	0.01%	Estimated to limit
Carbon Monoxide		Not Tested
Particulate Matter		Not Tested
Inert Gas	1.74%	Rainbow
Odorant	0.00%	Rainbow